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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/759,568

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Gary L. Johnson

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02/27/2007

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EXAMINER

LOWE, MICHAEL S

ART UNIT

PAPER NUMBER

3652

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/759,568	JOHNSON ET AL.	
	Examiner	Art Unit	
	M. Scott Lowe	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 is/are allowed.
- 6) ☒ Claim(s) 1-13, 19, 20 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,7,8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schonrock (US 2,836,316).

Re claim 1, Schonrock teaches a body for a refuse collection vehicle 10 having a frame, said body composing:

(a) a hopper compartment 24 mounted on the frame and having:

(i) a pair of opposing sidewalls defining a hopper compartment width;

(ii) a closed forward end;

(iii) an open rear end; and

(iv) a hopper compartment floor (not numbered) at a first level;

(b) a storage compartment 14 mounted on the frame adjacent to and to the rear of the hopper compartment 24, said storage compartment having:

(i) a pair of opposing sidewalls defining a storage compartment width;

(ii) a forward end that opens into the hopper compartment;

(iii) a rear end having a tailgate 22 mounted thereon; and

(iv) a storage compartment floor (not numbered) at a second level, said second level being raised above the first level;

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(c) a transition floor (not numbered) between the hopper compartment floor at the first level and the storage compartment floor at the second level;

(d) a crusher panel 32 (54,60) that is adapted to apply a downwardly directed compressive force to refuse material in the hopper compartment and to sweep said refuse material from the hopper compartment into the storage compartment;

(e) means 20 for removing refuse material from the storage compartment.

Re claims 2,3, Schonrock teaches the crusher panel has a pivot end (not numbered) and a sweep end (not numbered), said pivot end being pivotally mounted so that said crusher panel may be pivoted about a crusher pivot axis at its pivot end between a first orientation in which the sweep end is generally disposed above the pivot end and a second orientation in which the sweep end is adjacent to the storage compartment floor.

Re claim 4, Schonrock teaches the body:

(a) wherein the crusher panel is mounted adjacent to the rear end of the hopper compartment 24;

(b) which includes means for pivoting the crusher panel about the crusher pivot axis between said first orientation and said second orientation to apply a downwardly directed compressive force to refuse material in the hopper compartment 24, and to sweep said refuse material from the hopper compartment into the storage compartment

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Re claim 5, Schonrock teaches the means for pivoting the crusher panel about the crusher pivot axis comprises:

- (a) a crusher panel actuator (not numbered); and
- (b) an attachment mechanism (90,84, etc.) for attaching one end of the crusher panel actuator to the crusher panel, said mechanism comprising a linkage system (90,84, etc.) that permits the crusher panel to pivot between the first orientation and the second orientation through an arc of about 250 degrees.

Re claim 7, Schonrock teaches means 20 for removing refuse material from the storage compartment comprising a hoist that is adapted to raise the forward end of the storage compartment above the rear end thereof.

Re claim 8, Schonrock teaches the hoist adapted to raise the forward end of the storage compartment 14 so that the storage compartment floor is generally disposed at an angle of no more than about 35 degrees from the horizontal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schonrock (US 2,836,316) in view of Gaskin (US 4,096,956).

Re claim 6, Schonrock does not teach a reciprocating packer as claimed.

However, Gaskin teaches a reciprocating packer 44 (with actuator 48) as claimed in order to push refuse onto crusher/transfer panel 28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Schonrock by the general teaching of Gaskin to have the reciprocating packer in order to allow more room for loading refuse and to ensure the refuse is transferred from the loading section.

Claims 1-5,9-13,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gollnick (US 4,260,316) in view of Pruteanu (US 7,070,382).

Re claim 1, Gollnick teaches a body for a refuse collection vehicle having a frame 12, said body composing:

(a) a hopper compartment 18 mounted on the frame and having:

(i) a pair of opposing sidewalls defining a hopper compartment width;

(ii) a closed forward end;

(iii) an open rear end; and

(iv) a hopper compartment floor (forward or bottom of 40) at a first level;

(b) a storage compartment 14 mounted on the frame adjacent to and to the rear of the hopper compartment 24, said storage compartment having:

(i) a pair of opposing sidewalls defining a storage compartment width;

(ii) a forward end that opens into the hopper compartment;

(iii) a rear end having a tailgate 24 mounted thereon; and

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- (iv) a storage compartment floor (30,36,etc.) at a second level, said second level being raised above the first level;
- (c) a transition floor (rearward part of 40) between the hopper compartment floor at the first level and the storage compartment floor at the second level;
- (d) a crusher panel 20 that is adapted to apply a compressive force to refuse material in the hopper compartment and to sweep said refuse material from the hopper compartment into the storage compartment;
- (e) means 16,22 for removing refuse material from the storage compartment.

Gollnick does not clearly state whether the crusher panel applies the force downwardly. Pruteanu teaches a panel 46 that applies a downwardly directed compressive force to refuse material in a hopper compartment 24 and to sweep said refuse material from the hopper compartment into a storage compartment 22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gollnick by the teaching of Pruteanu to have the crusher panel apply a downwardly directed compressive force to refuse material in a hopper compartment and to sweep said refuse material from the hopper compartment into a storage compartment by having the panel sweep a more forwardly rotated angle in order to be able to sweep more material from the hopper.

Re claim 2, Gollnick as already modified teaches the crusher panel 20 has a pivot end (not numbered) and a sweep end (not numbered), said pivot end being pivotally mounted so that said crusher panel may be pivoted about a crusher pivot axis at its pivot end between a first orientation in which the sweep end is generally disposed

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above the pivot end and a second orientation in which the sweep end is adjacent to the storage compartment floor.

Re claim 3, Gollnick teaches the transition floor (not numbered) diverges away from the sweep end of the crusher panel 20 as the sweep end of the crusher panel approaches the storage component floor during pivoting of the crusher panel.

Re claim 4, Gollnick as already modified teaches the body:

- (a) wherein the crusher panel 20 is mounted adjacent to the rear end of the hopper compartment 18;
- (b) which includes means 50 for pivoting the crusher panel 20 about the crusher pivot axis between said first orientation and said second orientation to apply a downwardly directed compressive force to refuse material in the hopper compartment 18, and to sweep said refuse material from the hopper compartment into the storage compartment 14.

Re claim 5, Gollnick teaches the means for pivoting the crusher panel about the crusher pivot axis comprises:

- (a) a crusher panel actuator 50; and
- (b) an attachment mechanism (50 and pin(s)) for attaching one end of the crusher panel actuator 50 to the crusher panel 20, said mechanism comprising a linkage system (50 and pin(s)) that permits the crusher panel to pivot between the first orientation and the second orientation through an arc of about 250 degrees.

Re claim 9, Gollnick as already modified by Pruteanu teaches the means for removing refuse material from the storage compartment comprises an ejector mechanism 16,22, which includes:

(a) an ejector panel 16,22, having an upper end and a lower end, said upper end being mounted between the sidewalls of the storage compartment for axial movement between a forward position and a rear position;

(b) means 62,80 for moving the upper end of the ejector panel between the forward position and the rear position.

Re claim 10, Gollnick as already modified by Pruteanu teaches:

(a) wherein the ejector panel 22 is pivotally mounted about an ejector pivot axis at its upper end for pivotal movement between:

(i) a retracted orientation in which the lower end is disposed adjacent to the pivot end of the crusher panel when the ejector panel is in the forward position; and

(ii) an extended orientation in which the lower end is disposed rearwardly from the retracted position;

(b) wherein the upper end of the ejector panel 22 may be moved between the forward position and the rear position when the ejector panel is in the extended orientation;

(c) which includes an ejector actuator 62,80 that is located and arranged:

(i) to pivot the ejector panel about the ejector pivot axis between the retracted orientation and the extended orientation; and

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(ii) to move the upper end of the ejector panel 22 between the forward position and the rear position.

Re claim 11, Gollnick teaches the crusher panel 20 and the ejector panel 22 (16) are located and arranged so that pivoting of the ejector panel from the retracted orientation to the extended orientation while the crusher panel is in the second orientation will sweep the lower end of the ejector panel across the crusher panel.

Re claim 12, Gollnick teaches the ejector mechanism 16,22 includes an ejector over-center lock (the actuators 62,80 & their standard controls meet this limitation as broadly claimed) that is located and arranged to releasably lock the ejector panel in the extended orientation.

Re claim 13, Gollnick teaches an ejector cylinder drift lock (the actuators 62,80 & their standard controls meet this limitation as broadly claimed) that releasably locks the ejector panel in the retracted orientation.

Re claim 19, Gollnick teaches a body for a refuse collection vehicle having a frame 12, said body composing:

(a) a hopper compartment 18 mounted on the frame and having:

(i) a pair of opposing sidewalls defining a hopper compartment width;

(ii) a closed forward end;

(iii) an open rear end; and

(iv) a hopper compartment floor (forward or bottom of 40) at a first level;

(b) a storage compartment 14 mounted on the frame adjacent to and to the rear of the hopper compartment 24, said storage compartment having:

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(i) a pair of opposing sidewalls defining a storage compartment width;

(ii) a forward end that opens into the hopper compartment;

(iii) a rear end having a tailgate 24 mounted thereon; and

(iv) a storage compartment floor (30,36,etc.) at a second level, said second level being raised above the first level;

(c) a transition floor (rearward part of 40) between the hopper compartment floor at the first level and the storage compartment floor at the second level;

(d) a crusher assembly comprising:

a header tube (not numbered, pivot of 20) which is mounted between the sidewalls of the hopper compartment above the floor at the first level and adjacent to the transition floor;

(ii) a crusher panel 20 having a pivot end and a sweep end, said pivot end being pivotally mounted on the header tube so that said crusher panel may be pivoted about a pivot axis at its upper end between a first orientation in which the sweep end is generally disposed above the pivot end and a second orientation in which the sweep end is adjacent to the storage compartment floor;

(iii) a crusher panel actuator 50 for pivoting the crusher panel about its pivot axis between said first orientation and said second orientation;

wherein pivoting said crusher panel between said first orientation and said second orientation while refuse material is in the hopper compartment will cause said crusher panel 20 to:

- (iv) apply a directed compressive force to said refuse material in the hopper compartment; and
- (v) sweep said refuse material from the hopper compartment into the storage compartment 14;
- (e) an ejector panel 16,22 having an upper end and a lower end, said upper end being mounted between the sidewalls of the storage compartment for axial and pivotal movement therein so that:
 - (i) the ejector panel 22 may be pivoted about an ejector pivot axis at its upper end between a retracted orientation in which the lower end is disposed adjacent to the header tube and an extended orientation in which the lower end is disposed rearwardly from the retracted position;
 - (ii) the upper end of the ejector panel 22 (16) may be moved axially between a forward position and a rear position;
- (f) an ejector actuator 80,62 that is adapted:
 - (i) to pivot the ejector panel about the ejector pivot axis between the retracted orientation and the extended orientation; and
 - (ii) to move the upper end of the ejector panel between the forward position and the rear position.

Gollnick does not clearly state whether the crusher panel applies the force downwardly. Pruteanu teaches a panel 46 that applies a downwardly directed compressive force to refuse material in a hopper compartment 24 and to sweep said refuse material from the hopper compartment into a storage compartment 22. It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gollnick by the teaching of Pruteanu to have the crusher panel apply a downwardly directed compressive force to refuse material in a hopper compartment and to sweep said refuse material from the hopper compartment into a storage compartment by having the panel sweep a more forwardly rotated angle in order to be able to sweep more material from the hopper.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gollnick (US 4,260,316) in view of Pruteanu (US 7,070,382) as applied to claim 1, and further in view of Gaskin (US 4,096,956).

Re claim 6, Gollnick does not teach a reciprocating packer as claimed. However, Gaskin teaches a reciprocating packer 44 (with actuator 48) as claimed in order to push refuse onto crusher/transfer panel 28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gollnick by the general teaching of Gaskin to have the reciprocating packer in order to allow more room for loading refuse and to ensure the refuse is transferred from the loading section.

Claims 7,8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gollnick (US 4,260,316) in view of Pruteanu (US 7,070,382) as applied to claimed 1, and further in view of Schonrock (US 2,836,316).

Re claim 7, Gollnick does not teach the means for removing refuse material from the storage compartment comprising a hoist that is adapted to raise the forward end of

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the storage compartment above the rear end thereof. Schonrock teaches means 20 for removing refuse material from the storage compartment comprising a hoist that is adapted to raise the forward end of the storage compartment above the rear end thereof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gollnick by Schonrock to have means for removing refuse material from the storage compartment comprising a hoist that is adapted to raise the forward end of the storage compartment above the rear end thereof as an equivalent alternative removing means or have it as an additional removing means with ejector 40 in order to allow use of a smaller and less powerful removal actuators (to increase usable storage space).

Re claim 8, Gollnick as already modified by Schonrock teaches the hoist adapted to raise the forward end of the storage compartment so that the storage compartment floor is generally disposed at an angle of no more than about 35 degrees from the horizontal.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gollnick (US 4,260,316) in view of Pruteanu (US 7,070,382) as applied to claim 19, and further in view of Smith (US 5,209,537).

Re claim 20, Gollnick does not teach an apparatus for acquiring, lifting and transferring a container so as to deposit the contents of the container in the hopper compartment, said apparatus being mounted on the frame in front of the hopper compartment. Smith teaches an apparatus 30 for acquiring, lifting and transferring a

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container so as to deposit the contents of the container in the hopper compartment, said apparatus being mounted on the frame in front of the hopper compartment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gollnick by the general teaching of Smith to have an apparatus for acquiring, lifting and transferring a container so as to deposit the contents of the container in the hopper compartment, said apparatus being mounted on the frame in front of the hopper compartment in order to reduce manual labor and thus reduce costs and injuries.

Allowable Subject Matter

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-18 are allowed.

Conclusion

Applicant's arguments with respect to claim 6 rejected by Schonrock alone have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to the rejections over Pruteanu alone or as the primary reference over the claims as amended have been fully considered and are persuasive. The rejections over Pruteanu alone have been withdrawn.

Applicant's remaining arguments filed 12/27/07 have been fully considered but they are not persuasive.

Applicant argued that Schonrock does not teach a crusher panel since there are separate structural members 54 & 60 required to meet the limitations. However, Schonrock's crusher panel 64 meets the claimed limitations. Crusher panel does act to sweep refuse from the hopper as shown in figures 5-7. That item 60 acts to assist the sweeping of panel 54 does not affect the fact that panel 54 meets the currently claimed limitations. Panel 54 has a sweep end that is above crusher pivot axis 50 in figures 5,7, & 8.

Applicant argued that Gollnick does not teach the means for removing not attached to the crusher panel. However, Gollnick's crusher panel 20 is not attached to means 16,22 any more than those of applicant's invention are attached and the modification by Pruteanu does not change this.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argued that Gollnick's sweep end is not above the pivot end. However, this is met by the modification in view of Pruteanu.

Applicant argued that Gollnick's transition floor does not diverge away from the sweep end, however this taught as shown in at least figure 2 where the rear of the transition floor is shown to diverge away from the sweep end as currently claimed.

Applicant argued that Gollnick crusher panel does not pivot around 250 degrees. However, this is met by the modification in view of Pruteanu.

Applicant argued that Gollnick does not teach the over-center lock. However, Gollnick does teach the lock as the limitation is broadly claimed and thus met but actuators 62,80 and their associated controls.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-W; Th work offsite.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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